

1 I'd like to address the first question which was how does
2 the availability or lack of access to advance services in rural
3 communities affect economic development? And if I have time
4 I'll talk about the fourth question a little bit, which is the
5 future of advanced services in rural Alaska.

6 Just a couple of preliminaries. Advanced services, what
7 that is partly depends on your perspective and where you are.
8 If you're sitting in Anchorage or in Washington D.C. it's
9 broadband access or ISDN at least or T-1 or recorded T or
10 something even more than that.

11 If you're in rural Alaska advance services could be a
12 clean connection to the internet or in some cases even having a
13 phone whether it's land line or wire line so that's -- some of
14 the stories -- some of the examples I'll give relate just to
15 the fact of having a phone in rural Alaska, but I think the
16 analogy will carry forward.

17 Secondly, thoughts on economic development, it's my own
18 view that economic development must start from the local
19 citizenry, the local residents and it must be something that
20 starts from the bottom up. And the stories I'm going to tell
21 are about people like that, rather than government programs and
22 government involvement.

23 I found out about an hour ago I was going to talk and I
24 thought I'd talk about some friends of mine down in Homer who
25 run a thing called Jakolof Bay Ferry Service. This is Tom

1 Hopkins and Marsha Million. And about five or 10 years ago Tom
2 Hopkins, who was a mate on the Alaska Ferry System had a very
3 good job, retired from the ferry system, drew all his money out
4 and decided he was going to go into business for himself as a
5 true Alaskan with a little, small, wooden boat ferrying people
6 around Kachemak Bay in Homer and didn't have much money after
7 they bought the boat. Like everybody that owns a boat would
8 know, and so they couldn't advertise very much. And things
9 really started pretty slow and the key to their success has
10 been telecommunications.

11 First, it was -- originally when Tom was in the boat the
12 only way to get to him was by marine radio which is very
13 difficult to get to. And maybe he had an answering machine at
14 this home and when he came home either the answering machine
15 was overflowed or it hadn't worked or he'd call somebody back
16 and he couldn't get them, so it wasn't a very efficient way to
17 run a ferry service.

18 Well, what happened was eventually Tom got internet
19 connectivity on a wireless system that goes to his home across
20 the bay from Homer in Jakolof Bay. And those of you who know
21 -- well, all of you know where Jakolof Bay, so there's no land
22 line service there. What he had was called a Better's (ph)
23 wireless telecommunication system and it was not always very
24 good, but it's good enough to have internet connectivity.

25 So he put a web site up about his Jakolof Bay ferry

1 service and he gets now during the season dozen of hits every
2 day from people all over the world trying to decide what they
3 can do when they go to Homer besides fish and it's increased
4 his business by quite a bit. Again, it's not an advanced
5 service. It's fairly low bandwidth, but it's the type of thing
6 that makes development happen.

7 The other thing that Tom and Marsha did was to obtain
8 cellular phones which they now carry on their boats, so instead
9 of having to try and find someone with a CB radio if you want
10 to talk to them and hope that Tom and Marsha's boat is in a
11 place where you can contact them on CB and you're going to get
12 through, now you can call them on the cell phone. And you can
13 say, well, Tom, I'm going to be an hour late getting out to
14 pick up, can you come an hour later, or it looks kind of rough
15 out here, maybe you shouldn't pick me up today and they answer
16 you. And all of a sudden it's much more efficient dispatch of
17 this boat throughout Kachemak Bay.

18 And what's happened is they've gone from two boats now to
19 four boats, doubled capacity and more, and now they have lots
20 of competitors as well. So the next step will be, I think, for
21 Tom and Marsha not just the internet access or the very low
22 bandwidth of the cell phone, but a site where you can hear the
23 sound of the boat as it goes through the water and hear the sea
24 otters barking at you and feel -- and maybe even feel the boat
25 rocking, I don't know, but you have to move.

1 As people get more intense and more sophisticated the
2 people in rural Alaska have to respond. It's not enough just
3 to have a post card or a piece of paper or a simple internet
4 site, but something that's multi-media that will show that
5 we're as good as anybody else any place in the country.
6 I had about 10 examples, but I think I've used most of my
7 time so I'll stop there for the time being, but I think just a
8 few concluding comments for about 30 seconds. Certainly we
9 live in an information age and the key to the information age
10 is that Alaska -- people can live in Alaska and work any place.
11 We all read about telecommuting and telepoeting (ph).
12 We all know about the mythical Microsoft program in Sutton
13 or someplace out there who wants way more bandwidth out than he
14 can get, well, all this can happen. And if we want to move
15 Alaska from being an extractive economy to an information age
16 economy and a true center of global trade and connectivity,
17 there's no reason telecommunications can't do that. Thank you.
18 LT. GOV. ULMER: Thanks again, Don. Our final panelist
19 this afternoon is Marvin Yoder. Marvin is the city manager at
20 the Municipality of Galena, used to be a city manager down in
21 Southeast. He's certainly lived in many different parts of
22 Alaska. Mr. Yoder recently helped Galena win \$186,000 U.S.D.A.
23 grant for telehealth and distance learning, so Marvin, tell us
24 what you've been doing.
25 MR. YODER: First of all, I listened to everyone throw out

1 all these acronyms and I'm reminded of an incident with my
2 daughter, who was two, when I was out in the yard working and I
3 had about a 10 foot stepladder up. I went into the house for
4 something and came back out and she was halfway up there and as
5 soon as she saw me coming she kind of looked at me and realized
6 where she was and says, what am I doing up here?

7 I was one of those people that went to high school back in
8 the '50s and never heard much about any of this and then had
9 one experience in college at Oregon State where we had a
10 computer about half the size of this room to do a simple math
11 problem. And so then we fast forward to Galena 1996 and a lot
12 of different things are happening.

13 Galena started getting connected inside the community,
14 ended up with computer labs in both -- in all the grade
15 schools, junior high, high school and the charter school. Got
16 connected to the web and they decided that the students needed
17 to continue on learning that at home, and so they connected
18 through the students at home. Each student has a home computer
19 and also connected to the web from home. And so the entire
20 community is really wired and everyone has access to the
21 internet however they wish and it's a lot of people getting on.

22 Also at the same time they decided they needed some of
23 that community know-how inside so they started training kids,
24 high school students, and we now have high school students who
25 are compact certified there and can do warranty work on compact

1 computers. We also have one student in high school in Galena
2 this last year that passed the Microsoft A certification so,
3 therefore, we think we have the capability inside our community
4 to keep going to. Whatever is ahead, we'll do it.

5 That's been kind of Galena's motto. We call ourselves
6 innovative. People call us other things, but we are one of
7 those places that believe we can do things and we're not held
8 back that much.

9 In addition to this telemedicine grant then we are trying
10 to figure out how to overcome some of the problems. One of the
11 things is when you have a community that had about 200
12 telephones and suddenly you jump up to where you have more than
13 that in modems and connections, the pipeline gets a little
14 small. And Interior Telephone is our provider out there and
15 they've worked hard to keep up with what's going on, but the
16 original hookup was, I think, about 28 and they went to 33, and
17 yet there are times when that gets pretty tight when you have a
18 whole bunch of people getting on at once.

19 I had an experience just, I think, about two weeks ago
20 where I opened up and found out I had 11 e-mail messages and
21 all of a sudden it got stuck on one for a long time and I
22 started trying to see what was going on. I ended up getting
23 about 400,000 bits of information in 45 minutes. It just
24 depends how many people are on at the time. There's some times
25 you click on and nothing, you can't get on or you get kicked

1 off. I've had people tell me they wait till midnight to try to
2 get on because there's just so many other people on it. And so
3 one of the things we realize we need to do is to figure out how
4 to get that -- over that one little hump.

5 We do have a proposal out right now, requests for
6 proposals from some companies to help us overcome that. We
7 feel that if we're going to do the telemedicine, distance
8 learning program as we said, we don't know if we're going to go
9 with fiber optic or satellite or what we're going to do. We're
10 just getting proposals on that and eventually we're going to
11 get that. Within the next year we expect to have that problem
12 solved, but we do want to be able to reach out at those higher
13 speeds and figure out what we're going to do.

14 The school district did put up a satellite and is not
15 really totally connected yet, but one of the examples of
16 persons on their own computer and trying to download something
17 and it kept showing it was going to take over 45 minutes, they
18 went into the one that was connected to the satellite and got
19 it in two minutes. So they felt like that there's some real
20 potential there. It's at 512, but depending on how they split
21 it up.

22 Economic applications, where we going to be in five years.
23 I've already had people in my office who are doing things in
24 the community that they think have an opportunity for a web
25 site or for some type of a connection. There's equal tourism.

1 People flying in and rafting down the Nowitna River, the Melozi
2 River, need to contact -- they need to find customers for their
3 service. There's other that are doing pike fishing. One guy
4 especially has been doing real good at pike fishing. Mostly
5 he's been doing word of mouth. He's asking about a web site
6 because of his -- a lot of pike out in the flats and there it's
7 mostly catch and release so it's a renewable resource. And so
8 it's been things like that, that they're looking at.

9 And so we think that that's kind of the direction we're
10 going. We know we have the people there and when these people
11 talk to me about it, I know they can do it because their kids
12 are in high school and they're learning how to set up web pages
13 and all that. They're going to do it. And we're just looking
14 forward to getting bandwidth up where we can do this in a real
15 efficient manner.

16 LT. GOV. ULMER: Great, thank you very much. And thanks
17 to all of our panelists. Commissioner, do you have any
18 questions?

19 COMMISSIONER NESS: No, but I like a lot of the visions
20 that you've been talking about.

21 LT. GOV. ULMER: Commissioner?

22 CHAIR THOMPSON: I do. We heard this morning from
23 programs that deliver education and health care services and
24 those are programs that are presented funded through different
25 federal programs. What examples do you have of economic

1 development? What I'm wondering is, you know, how soon is it
2 going to be before some of the businesses that -- like the one
3 Mr. May gave us of an example of, are going to be able to help
4 support the network or offer some support for the network?

5 MR. DAVIS: May I comment?

6 LT. GOV. ULMER: Go ahead.

7 MR. DAVIS: Well, WAVE is right now ready to do internet
8 kiosks. WAVE has stores in a lot of villages in the Calista
9 region all the way up to Selawik so it's outside of the Calista
10 region. And what's hampering everything is availability for
11 internet. And WAVE is not at all untypical of what can happen
12 out there. There are people out there that want to sell
13 jewelry or art work right now.

14 Five years ago an old man called me from Selawik wanted to
15 put up a web site for fish hosting, for taking people out
16 fishing. He has a guiding license. He has a business. He
17 wants to promote it to Europe, and this was five years ago.
18 And since then he's bought a bigger boat.

19 LT. GOV. ULMER: Any of the other panelists wish.....

20 MR. YODER: I'd just say that right now besides the one
21 going through the school, there is interconnectivity through
22 Interior Telephone at a flat fee per month and you can get on
23 the internet that way. So there are already people in Galena
24 who are paying their way on that without going through any
25 (indiscernible- voice lowers).....

1 CHAIR THOMPSON: Mr. Yoder, we heard Mr. Harris talk about
2 the decrease of folks in the village, the exodus, because they
3 don't have the jobs. Do you think, based on what you've done
4 in the community of Galena, you're going to be able to keep
5 some of your people there?

6 MR. YODER: Right now we're probably in a growing mode.
7 I'm not sure exactly how long that can continue. There is
8 limited availability for jobs, for long-term jobs. Again, you
9 get to the thing of do you have increasing jobs outside of
10 government and the answer is very few.

11 CHAIR THOMPSON: Uh-hum.

12 MR. YODER: Government is the big employer. And so -- but
13 yes, there are things settling in.

14 Whether or not -- if you look at it regionally, I'm not
15 sure, because regionally what you find is that some of the
16 people are moving into Galena because there's more jobs there
17 right now so they might come in from one of the other villages,
18 and so you look at it on a regional basis and it's probably
19 pretty similar to what he's talking about.

20 LT. GOV. ULMER: Tom?

21 MR. HARRIS: The key is access to market. And there are
22 wonderful resources that Alaska has, but one of the Korean
23 trade representatives told me that if you can't get to market
24 you can't sell access to that resource.

25 Right at this moment in time approximately 65 percent of

1 all the guides in the state live outside the state as their
2 primary residence. These are the big game guides. And I've
3 just come back from the Safari Club annual meeting and it's a
4 huge industry, but it's an industry at this moment in time that
5 because the rural Alaskan that lives in the community does not
6 have access to. It's very challenging.

7 We just finished the Sportsmen Show here and it's
8 wonderful to see so many dot coms in there, but there were
9 still -- those who were actually from the villages, very few of
10 them had dot coms, so their access to that market and being
11 able to meet that need and save that revenue for the community
12 is severely handicapped.

13 So we're hoping that -- our organization, one of the
14 things we're doing when we invest in our new network is to
15 build in the capacity to host some web sites for the members
16 who can't host their own and that way try to find a way to get
17 them to market. The cost per entry or our cost of getting to
18 that market as a result of that network has dropped by 90
19 percent and it's a direct saving onto our members.

20 LT. GOV. ULMER: Might just follow up just real briefly on
21 your point about the key being access to markets and I just
22 make this comment briefly for our visitors to Alaska. I know
23 people who live on the East Coast tend to think of Alaska as
24 way out there at the end of the line, so to speak, and I just
25 want to give you a different perspective.

1 Alaska is really at the center of everything. We've equal
2 distance to Japan, to Europe and to the East Coast. We're in
3 the middle of that, and so that has really created a strategic
4 location advantage for Alaska that allows us in terms of our
5 transportation and our trans-shipment a strategic advantage
6 that people didn't think about before. Well, FedEx and others
7 have now figured it out. And if you go out to the airport
8 you'll see a huge complex of air cargo.

9 The Anchorage International Airport has become the center
10 of the hub, not way out there. So our access to market, our
11 ability to be a place which companies see, at least Anchorage
12 and by extension the rest of Alaska, is very close to Anchorage
13 really. We are really in an amazing position to be able to
14 link up our transportation location advantage with our
15 telecommunications.

16 And, of course, because of the fiber optic out of --
17 really I've forgotten what the numbers are, someone here can
18 probably tell us that during the public testimony, but we have
19 really more fiber out of Anchorage to the Lower 48 than the
20 East Coast has to Europe. It's really quite remarkable. We
21 have a lot of bandwidth.

22 So you kind of start to put all those things together, you
23 get some wonderful economic development opportunities for the
24 state of Alaska. And although today we are focusing largely on
25 some of the inadequacies, the glass being half full instead of

1 -- or half empty instead of half full from the perspective of
2 rural Alaska. If we can improve that link Alaska as a whole
3 becomes a tremendous place for opportunity in this 21st century
4 information -- linking the information technology with the
5 transportation and location advantage. Yes.

6 MR. DAVIS: I'll make it brief. In reference -- we're
7 here for the economic side, but in terms of, like, the people
8 leaving Galena or village population or whatever, having the
9 internet access is going to help the youth stay off of drugs.
10 It's going to help the suicide rate. It's going to help the
11 quality of living. Any which way you look at it, it's going to
12 help rural Alaska. And that's going to pay off economically in
13 health care, in education, in whatever you want to name, it's
14 going to pay off. It's going to nothing but good for rural
15 Alaska.

16 LT. GOV. ULMER: Okay. Nan, did you have anything?

17 CHAIR THOMPSON: No.

18 MR. RHYNER: If I might be able to respond to.....

19 LT. GOV. ULMER: Sure, go ahead.

20 MR. RHYNER:Commissioner Thompson? The one resource
21 that many of these small villages have in abundance is human
22 resource. And what we have with the deployment of advanced
23 services is the opportunity to provide both the chicken and egg
24 at the same time. It'll give us the opportuni- -- or the
25 ability to provide the educational tools to these communities

1 and then give them access back to the world wide market. And
2 what we can do with those human resources is develop like
3 service bureaus out there, do things like the school's doing in
4 Galena, train these people to be web masters and set up E
5 commerce sites, those kind of things which will really take
6 advantage of the human resource.

7 LT. GOV. ULMER: Kathy, do you have any questions or
8 comments?

9 MS. BROWN: Yeah, I just want to try and be clear when I
10 leave that I understand. I heard some folks say that the last
11 mile's the best mile in Alaska, so that's interesting to me and
12 I just wonder if you all think that's true? In other words, is
13 the local distribution system there and really ready for DSL,
14 for instance? Is there fixed wireless, are there wireless
15 carriers who are taking care of the short haul, but that the
16 problem is transport and long haul and that we heard this
17 morning that that was the problem. First, is that true?

18 And then secondly, I've heard a lot about sort of the --
19 the discussion goes two ways. One, let's have a monopoly
20 whether it be a government monopoly or a commercial monopoly
21 because, after all, we have to aggregate these services and
22 there's just not enough people to have more than one provider.
23 I heard that.

24 On the other hand I heard, no, no, no, let's not do that
25 because we know that competitive pressures are what's going to

1 bring prices down in choice of service. And I need to get a
2 sense from you all who are doing economic development how you
3 see that landscape?

4 MR. RHYNER: Well, coming from the LEC side, I guess I'll
5 answer the first part of your question. And, again, as Mr.
6 Fauske said, most of these remote villages, the ones that are
7 primarily utilizing the satellite connections and are not on
8 the wired network that you were talking about, are generally
9 very compact. And there just isn't an issue with deploying DSL
10 out there.

11 In fact, we've priced it out and we're in the process of
12 Beta testing both DSL and cable modems in these smaller
13 communities. We can deploy DSL in a small community like this
14 for the first 24 customers for around \$50,000. I don't believe
15 there's a wireless option out there that you can deploy for
16 those kind of dollars, so it's there. It exists. We can do
17 it.

18 The issue is how you get -- it's the transport of the
19 broadband out to the community that's the real issue.

20 MS. BROWN: Well, it sounds like it's the transport back
21 to Anchorage or to some other point, but not to the community,
22 is that right? So here you have your ability to network that
23 community, but you need to get back to the point of presence,
24 say, of the internet provider,.....

25 MR. RHYNER: Exactly.

1 MS. BROWN:is that right?

2 MR. RHYNER: Yeah, either to Fairbanks, Anchorage or
3 Juneau. You have to get there so you can connect with the
4 terrestrial facility.

5 MS. BROWN: So let me ask you about this part, should that
6 be competitive? Is it -- should it be provided by one provider
7 or multiple providers? What's going to bring the best kind of
8 thing to Alaska?

9 MR. RHYNER: Well, as I said in my opening remarks, I
10 think it needs to be a shared network. I think we could do
11 that through shared ownership, but I think it needs to be a
12 single network where everybody is concentrating on making it
13 work and making it the most efficient network we can make it.

14 MS. BROWN: Are there any -- is there anyone else who
15 thinks differently than that?

16 MR. HARRIS: I'd have to say that, you know, the old RCA
17 network was a monopoly but it was the best thing since sliced
18 bread for those communities. It opened up communication and
19 resources.

20 It hasn't been that long ago, in fact, '91 the last time I
21 was living in the rural community, but you really saw the
22 impact of not having services. I saw government checks that
23 were charged check cashing fees of 35 percent simply because
24 they could not access money, could not -- and the ATMs that
25 have gone out there have done an enormous -- there needs to be

1 more of them out there. But in some form of cash. And rural
2 Alaska does pay the bill without those services sooner or
3 later.

4 LT. GOV. ULMER: Any other panelists care to comment on
5 that discussion? I suspect that there are probably a few
6 people in the audience that may also want to answer your
7 question, Kathy, under public testimony. Any other comments or
8 questions?

9 MS. BROWN: Thank you.

10 LT. GOV. ULMER: Thank you very much to our economic
11 development panel, a very important part of Alaska's
12 utilization of this technology.

13 The final portion of our day is a public comment period.
14 I think I will go ahead and roll right into that without taking
15 another break. At this point we only have four or five people
16 who have signed up who actually wish to testify. We would like
17 to make certain that anyone who is here today has that
18 opportunity. Is there another sign-up sheet somewhere, Paula,
19 or just in case somebody changes their mind and decides that
20 they want to.....

21 If you'll just give Paula your name if you decide that you
22 want to testify even though you haven't signed up to do so.

23 All right. Let's see, Ernie Baumgartner from McGrath
24 Light & Power. Are you still with us? Yes. I hate to ask
25 people to come to the microphone, but that's the only way we

1 can record your comments. Thank you very much. I hope that's
2 not too intimidating. We're real friendly.....

3 MR. BAUMGARTNER: No, that's fine.

4 LT. GOV. ULMER:folks, so don't worry about the mic.

5 MR. BAUMGARTNER: Okay. My name is Ernie Baumgartner.
6 I'm from McGrath. And to my (sic) employer McGrath Light &
7 Power which is a subsidiary of MTNT which is a Native
8 Corporation in that region. It's for four village communities,
9 McGrath, Takotna, Nikolai, Telida, which is where MTNT come
10 from.

11 The issues that you've been addressing here today are ones
12 that were very important to us. A year ago I was a total baby
13 in this whole area. My use of the internet was to get on
14 CompuServe and go after my e-mail by dialing a long distance
15 number, then go and have dinner, come back, hopefully my e-
16 mails were in.

17 It's hard to run a business that way. It's very hard.
18 And so, consequently, we got to looking at and give it some
19 thought, I wonder if we can create our own ISP. And in so
20 doing and in going through the process of this I was listening
21 to the testimony and the problems and so forth I see, I think a
22 lot of the questions that were voiced we found at least
23 portions of the answers, not all of them and maybe not even the
24 best answers, but at least some.

25 One is that you talk about bandwidth. Bandwidth is an

1 expensive commodity. We look up in space and you see the air
2 and you think it's unlimited, but there's only a certain ring
3 that you can put stationary satellites in. So, consequently,
4 at a 2 degree beam width there's only a finite number that you
5 can stick up there, but we all know that.

6 Well, what we've done is that we've built an
7 infrastructure that has your major hubs like Anchorage,
8 Seattle, Fairbanks, that's put up individual pipes to every
9 receiver. And so for a community like McGrath we may have a
10 dozen federal agencies in there, maybe three or four state
11 agencies, the schools and so forth, and everybody has their own
12 dedicated pipe right back to Anchorage or wherever they're
13 going. If, on the other hand, we put the traffic shapers (ph)
14 on the McGrath end at the earth station, then we can share that
15 bandwidth going back and eliminate some of the waste on the
16 bandwidth.

17 When you think about it, an office worker on a computer
18 that's connected on a dedicated line is usually not using more
19 than what, 30 minutes of transmission time a day. And that's
20 if they're a busy person, yet you're paying for that bandwidth
21 for 24 hours. So instead of having your network break out in
22 Anchorage we need to devise ways of traffic shaping on the
23 local end.

24 Now we did that in McGrath with the internet. We put an
25 ISP in at McGrath. We did that because one, we knew that

1 bandwidth was going to be expensive. And if we could give
2 people a local access point and then we only use bandwidth when
3 we're trying to pass data back and forth, then we could buy a
4 much smaller segment of that bandwidth and give fast speed to
5 our customers.

6 In so doing we've also gone ahead and introduced wireless
7 land. And we using an 11 megabyte spread spectrum wireless out
8 there. This system is about as fast as your PC. You click,
9 it's there. The -- you go to get e-mail, when I go back home
10 I'll probably have oh, 50, 60 e-mails. It will take less than
11 one second to pull them in. Just bing, it's there. This is in
12 a rural community of 430 people.

13 We have Dial-Up access because the wireless infrastructure
14 is expensive. The -- when we first started putting it in it
15 was about \$1,000 per customer. It's down about \$100 right now.
16 So most people couldn't afford it so they wanted Dial-Up, so we
17 put in 336 with modems, and you know, hooked up those that
18 couldn't afford the wireless that way. Well, they're only 336
19 to the server which means they get their e-mail just like that.
20 If they're browsing we have a cash set-up in there so that most
21 of their stuff if they've ever been on that side before, they
22 go with just upbasing information. It doesn't have to pass all
23 that information through those pipes. So, consequently, our
24 customers are getting a high quality of service.

25 You know, I pulled in your web page on Thursday when I

1 heard about this. It took four seconds to get it from
2 Washington and download the whole thing the first time. Then I
3 waited a little bit and went in and, of course, it was on my
4 proxy and I hit and it was there. I went to the State of
5 Alaska, which has a lot of graphics, a very beautiful home
6 page. That took me 20 seconds to bring it in the first time,
7 but after that it was there within about two or three.

8 So the point, again, is that the quality of what we have
9 produced out there is very good. Certainly up to standards
10 with anything in the city. It cost us about \$70,000 to put
11 that in. That is over twice what it should have, but we didn't
12 know what we were doing so we were buying things we didn't need
13 and having to do things twice and three times.

14 The -- we've learned enough now that we can put this in a
15 location for, like I say, less than half. I think I estimated
16 to the board \$30,000. The thing is that you have to have it --
17 local expertise. So I looked around in McGrath and I found a
18 14 year old boy, and I said how would you like to have a part-
19 time job for 8 bucks an hour. And he said, cool. So last
20 summer I took him over to Matnet in the valley here and I got
21 with a guy there, Tom Arnold, and I said can you teach him how
22 to use Lennox. And he said, sure. So for three days he sat
23 with him.

24 Then he went home and I bought him a computer, a \$350
25 special right off the bottom shelf there and set him up. A

1 month later he came to me and said I broke my computer. I
2 said, what did you do? He said, I don't know, I destroyed the
3 bios. So I said well, we don't want to do that too often. He
4 said okay, so I bought him another computer, so I spent \$350
5 plus his three days there. And when we put the internet in in
6 September he was ready to go. Now he's running that thing.
7 He's administering that.

8 The problem with 14 year olds they grow up. One neat
9 thing about people is we keep creating new 14 year olds. So
10 the supply won't run out.

11 The thing that I've noticed that I want to impress also is
12 not that this can't be done. When we started talking to the
13 community about it I created a list and on one side I put what
14 are the problems and what are going to be the obstacles to
15 overcome in creating an internet. We filled up a whole sheet,
16 you know, those big, what do you call them -- well, just a big
17 sheet of paper. We filled that whole thing up with all kinds
18 of reasons. Then we said well, what can we do? And we only
19 had three different ideas on it. One of them was well, we can
20 look at see what it costs. So I went back to my office and
21 took the sheet with all the things we were the problems, just
22 wadded it up and threw it in the garbage, and we started on the
23 three items that were on the left side. And that's the way we
24 moved forward on this.

25 The community as a whole was real sluggish to respond.

1 Part of the reason is that they were getting some promise of
2 free internet service through the school. Of course, we
3 realized that that wasn't going to be commercially available,
4 so we were forced economically to look into this other venture
5 too, and go ahead. But because of the interest of it
6 commercially, in other words, looking at it for our business,
7 and when I say that I'm talking about for the whole community,
8 we focused real hard in delivering all the aspects necessary
9 for success.

10 We worked with the university to create classes to teach
11 people how to use the internet. We created more skill in our
12 people for working on problems. And when we first started
13 there people didn't know even what a browser was much less, you
14 know, how to really use one effectively. Most machines were
15 old, didn't have the capabilities of even putting on IE-5 or
16 anything like that. So it was a process really of with each
17 person we turned on having to spend time with them, teach them
18 and so forth and so on. We worked with the community,
19 university and school. Eventually you see that excitement
20 building.

21 The next step that we're going forward with now is when I
22 get back there's going to be a meeting with the business
23 leaders to create a vision of growth for the community and how
24 we can move forward. And one of the first items on that agenda
25 is tourism because we don't have much other than people and

1 black spruce for natural resources there. So anyway, it's a
2 move forward.

3 And there were a lot of problems that were brought up, but
4 most of them were not that difficult to solve. So if there's
5 ways that the -- you asked should the -- you know, this thing
6 be regulated or -- excuse me, monopolized or not, in most small
7 communities there's not two of anything. You know, I've seen
8 grocery stores try to start up, and usually it doesn't work.
9 The small community can only handle one. On the other hand, if
10 you block competition then it tends to stagnate things, so I
11 don't know what the answer is.

12 It's one that has to be looked pretty hard at, but I
13 definitely think that anything we can do to move forward to
14 reducing the long-haul costs because that's what we've all been
15 talking about is going to help. And so the idea of looking at
16 traffic shapers or some devices on the local end to consolidate
17 the data going back is something worth looking at.

18 Another thing, that even in McGrath we've only been going
19 a little bit on this, I've seen a definite migration from the
20 school system to the commercial system. And the reason is
21 because of the level of service and the quality. It's
22 definitely faster and if there's problems they're fixed right
23 away.

24 Since we turned up at the end of September we haven't had
25 a single server crash. Our availability has been 99.98 percent

1 of the time, and those .02 percents were Eagle River earth
2 station issues. So, you know, the quality is there. It can be
3 maintained locally, it's not that we can't do this. We can do
4 it. Thank you.

5 LT. GOV. ULMER: Great. Ernie, thank you very much for
6 sharing your experience with us, and congratulations on what
7 you've been able to do for your community.

8 The next person on our list is Steve Hall with ACS. Are
9 you still here, Steve? Okay. Ramya Subramanian, how am I doing
10 on that?

11 MS. SUBRAMANIAN: You got it.

12 LT. GOV. ULMER: All right. AKLA.

13 MS. SUBRAMANIAN: Thank you for the opportunity to speak
14 to the importance of expanding information technology access to
15 the underserved rural and tribal areas.

16 My name is Ramya Subramanian, and I'm here today as the
17 current president of the Alaska Library Association, an
18 umbrella organization that represents several libraries,
19 public, state, academic, rural and urban alike.

20 The democratic principle of equal access to information
21 for all which formed the very foundation of public libraries
22 200 years ago are even truer today as we enter the age of
23 information technology. Libraries have played a very critical
24 role in enabling residents of distant areas to become literate
25 in the tools of information technology offering classes,